

AMENDMENTS TO THE CLAIMS

Upon entry of this amendment, the following listing of claims will replace all prior versions and listings of claims in the pending application.

IN THE CLAIMS

Please amend claims 1, 3, 4, 6-10, 11, 12, 14, 17-20, 22, 24-28, 30, 33-35, 40, 45 and 46, cancel claims 36 and 41, and add new claims 47 and 48 as follows:

1. (Currently Amended) A method of controlling usage, by a user, of network resources of a communications network beyond a network entry device of the communications network that serves as the user's entry point to the communications network, the method comprising acts of:

(A) configuring a port module of the network entry device with one or more packet rules corresponding to an identity of the user, ~~wherein the user is using a user device that is directly connected to the network device;~~

(B) receiving, at the port module, a packet from ~~the~~ a user device; and

(C) before using, by the user, any of the network resources beyond the network entry device, applying the one or more packet rules to the received packet to control usage, by the user, of any of the network resources beyond the network entry device.

2. (Original) The method of claim 1, further comprising:

(D) prior to act (A), authenticating the identity of the user, wherein act (A) results from the authentication.

3. (Currently Amended) The method of claim 1, wherein act (C) further comprises ~~comprising an act of:~~

~~(D) repeating act (C)~~ applying the one or more packet rules for all packets received at the port module ~~until the user logs off of the communications network.~~

4. (Currently Amended) The method of claim 1, wherein the port module is dedicated to receiving one or more packets from the device of the user device ~~until the user logs off of the communications network.~~

5. (Original) The method of claim 1, the method further comprising:
(D) selecting the one or more packet rules based on the identity of the user.
6. (Currently Amended) The method of claim 5, wherein the identity of the user is associated with a role assigned to the user, and the role is associated with the one or more packet rules, and wherein act (D) further comprises:
selecting the one or more packet rules based on the role assigned to the user.
7. (Currently Amended) The method of claim 6, wherein act (A) further comprises:
configuring the port module according to the role assigned to the user.
8. (Currently Amended) The method of claim 1, wherein the method further comprises an act of:
(D) routing the packet beyond the network entry device based on the one or more packet rules.
9. (Currently Amended) The method of claim 1, wherein the method further comprises an act of:
(D) preventing the packet from being transmitted ~~onto a transmission medium of the communications network~~ beyond the network entry device based on the one or more packet rules.
10. (Currently Amended) The method of claim 1, wherein act (C) comprises:
configuring the received packet based on the one or more packet rules.
11. (Currently Amended) The method of claim 10, wherein configuring the received packet comprises an act of:
changing information included in the received packet.

12. (Currently Amended) The method of claim 10, wherein configuring the received packet comprises an act of:

adding information to the received packet.

13. (Original) The method of claim 1, wherein the method further comprises an act of:

(D) controlling an amount of bandwidth on the communications network consumed by the user based on the one or more packet rules.

14. (Currently Amended) The method of claim 1, wherein the method further comprises an act of:

(D) controlling access to at least a second device ~~devices~~ residing on the communications network based on the one or more packet rules.

15. (Original) The method of claim 1, wherein the method further comprises an act of:

(D) controlling access to information stored on devices residing on the communications network based on the one or more packet rules.

16. (Original) The method of claim 1, wherein the method further comprises an act of:

(D) controlling access to at least a portion of an application stored on a device residing on the communications network based on the one or more packet rules.

17. (Currently Amended) A network entry device serving as an entry point to a communications network for a user and operative to control usage of network resources by the user beyond the network entry device, the network entry device comprising:

a port module including port configuration logic to configure the port module with one or more packet rules corresponding to an identity of the user, ~~wherein the user is using a user device that is directly connected to the network device~~, the port module further including a physical port to receive a packet from ~~the~~ at least one user device and rule application logic to apply the one or more packet rules to the received packet before using, by the user, any of the network resources beyond the network entry device.

18. (Currently Amended) The system of claim 17, further comprising:

authentication logic to authenticate the identity of the user, wherein the configuration logic is operative to configure the port module in response to the authentication of the user.

19. (Currently Amended) The system of claim 17, wherein the rule application logic is operative to apply the one or more packet rules to all packets received from the ~~device of the~~ least one user device at the port module ~~until the user logs off of the communications network~~.

20. (Currently Amended) The system of claim 17, wherein the port module is dedicated to ~~receiving one or more packets from the device of the least one user device until the user logs off of the communications network~~.

21. (Original) The system of claim 17, wherein the port configuration logic is operative to select the one or more packet rules based on the identity of the user.

22. (Currently Amended) The system of claim 21, wherein the identity of the user is associated with a role assigned to the user, and the role is associated with the one or more packet rules, and wherein the port configuration logic is operative to select the one or more packet rules based on the role assigned to the user.

23. (Original) The system of claim 22, wherein the port configuration logic is operative to configure the port module according to the role.

24. (Currently Amended) The system of claim 17, wherein the port module is operative to route the packet beyond the network entry device based on the one or more packet rules.

25. (Currently Amended) The system of claim 17, wherein the port module is operative to prevent the packet from being transmitted beyond the network entry device ~~onto a transmission medium of the communications network~~ based on the one or more packet rules.

26. (Currently Amended) The system of claim 17, wherein the rule application logic is operative to configure the received packet based on the one or more packet rules.

27. (Currently Amended) The system of claim 26, wherein the rule application logic is operative to configure the received packet by changing information included in the received packet.

28. (Currently Amended) The system of claim 26, wherein the rule application logic is operative to configure the received packet by adding information to the received packet.

29. (Original) The system of claim 17, wherein the port module is operative to control an amount of bandwidth on the communications network consumed by the user based on the one or more packet rules.

30. (Currently Amended) The system of claim 17, wherein the port module is operative to control access to at least a second device ~~devices~~ residing on the communications network based on the one or more packet rules.

31. (Original) The system of claim 17, wherein the port module is operative to control access to information stored on devices residing on the communications network based on the one or more packet rules.

32. (Original) The system of claim 17, wherein the port module is operative to control access to at least a portion of an application stored on a device residing on the communications network based on the one or more packet rules.

33. (Currently Amended) A network entry device serving as an entry point to a communications network for a user, the network entry device operative to control usage of network resources beyond the network entry device by the user and comprising:

a port module including a physical port to receive a packet from a device used by the user and rule application logic to apply one or more packet rules to the received packet before using, by the user, any of the network resources beyond the network entry device; and

means for configuring the port module with the one or more packet rules based on an identity of the user, ~~wherein the user device is directly connected to the network device.~~

34. (Currently Amended) A computer program product, comprising:
a computer-readable medium; and
computer-readable ~~signals~~ information stored on the computer-readable medium that define instructions that, as a result of being executed by a computer, instruct the computer to perform a process of controlling usage of network resources, by a user, of a communications network beyond a network entry device ~~of the communications network~~ that serves as the user's entry point to the communications network, the process comprising acts of:

(A) configuring a port module of the network entry device with one or more packet rules corresponding to an identity of the user, ~~wherein the user is using a user device that is directly connected to the network device;~~

(B) receiving, at the port module, a packet from the user device; and

(C) before using, by the user, any of the network resources beyond the network entry device, applying the one or more packet rules to the received packet to control the usage, by the user, of any of the network resources beyond the network entry device.

35. (Currently Amended) A method of controlling network resource usage ~~of network resources of a communications network~~ by a user at a network entry device of the communications network that serves as the user's entry point to the communications network, wherein the user has an assigned role with respect to the communications network, and the assigned role is associated with one or more packet rules, each packet rule including a condition and action to be taken if a packet received at ~~a device~~ the network entry device satisfies the condition, the method comprising acts of:

(A) receiving a packet including identification information of the user from a device of the user at a port module of ~~the a~~ the network entry device;

(B) determining the assigned role of the user based on the identification information; and

(C) configuring the port module of the network entry device with the one or more packet rules associated with the assigned role of the user.

36. (Canceled).

37. (Original) The method of claim 35, wherein user information about the user is stored on a computer-readable medium residing on the communications network, the user information including identification information and the assigned role of the user, and act (B) further comprises acts of:

accessing the stored user information to determine if the identification information included therein matches the identification information included in the received packet; and if it is determined that the stored identification information matches the received identification information, determining the assigned role from the stored user information.

38. (Original) The method of claim 35, further comprising:

(D) assigning the assigned role to the user.

39. (Original) The method of claim 35, further comprising:

(D) authenticating the identity of the user.

40. (Currently Amended) A system for controlling network resource usage ~~of network resources of a communications network~~ by a user at a network entry device of the communications network that serves as the user's entry point to the communications network, wherein the user has an assigned role with respect to the communications network, and the assigned role is associated with one or more packet rules, each packet rule including a condition and action to be taken if a packet received at ~~a device~~ the network entry device satisfies the condition, the system comprising:

a port module of the network entry device, the port module including a physical port to receive a packet including identification information of the user from a device of the user and port configuration logic to configure the port module with the one or more packet rules associated with the assigned role of the user; and

an authentication module to determine the assigned role of the user based on the identification information.

41. (Canceled).

42. (Original) The system of claim 40, wherein user information about the user is stored on a

computer-readable medium residing on the communications network, the user information including identification information and the assigned role of the user, and

wherein the authentication module is operative to control accessing the stored user information to determine if the identification information included therein matches the identification information included in the received packet, and to determine the assigned role from the stored user information if it is determined that the stored identification information matches the received identification information.

43. (Original) The system of claim 40, further comprising:
assigning logic to assign the assigned role to the user.

44. (Original) The system of claim 40, the authentication module is operative to authenticate the identity of the user.

45. (Currently Amended) A system for controlling ~~resource~~ usage of network resources of a communications network by a user at a network entry device of the communications network that serves as the user's entry point to the communications network, wherein the user has an assigned role with respect to the communications network, and the assigned role is associated with one or more packet rules, each packet rule including a condition and action to be taken if a packet received at ~~a device~~ the network entry device satisfies the condition, the system comprising:

a port module of the network entry device, the port module including a physical port to receive a packet including identification information of the user from a device of the user and port configuration logic to configure the port module with the one or more packet rules associated with the assigned role of the user; and

means for determining the assigned role of the user based on the identification information.

46. (Currently Amended) A computer program product, comprising:

a computer-readable medium; and

computer-readable ~~signals~~ information stored on the computer-readable medium that define instructions that, as a result of being executed by a computer, instruct the computer to perform a process of controlling network resource usage ~~of network resources of a~~

~~communications network~~ by a user at a network entry device of the communications network that serves as the user's entry point to the communications network, wherein the user has an assigned role with respect to the communications network, and the assigned role is associated with one or more packet rules, each packet rule including a condition and action to be taken if a packet received at ~~a device~~ the network entry device satisfies the condition, the process comprising acts of:

(A) receiving a packet including identification information of the user from a device of the user at a port module of a network entry device;

(B) determining the assigned role of the user based on the identification information; and

(C) configuring the port module with the one or more packet rules associated with the assigned role of the user.

47. (New) The method of claim 1, wherein act (B) further comprises, receiving, at the port module, a packet from the user device to identify the user to the network entry device.

48. (New) The method of claim 47, wherein act (B) further comprises, receiving, at the port module, the packet in response to the network entry device requesting login information from the user device.